

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059244

Luminaire Tested: S123RDRP-S340D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059244  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S340D950-X4F0-XX-UDD-WVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

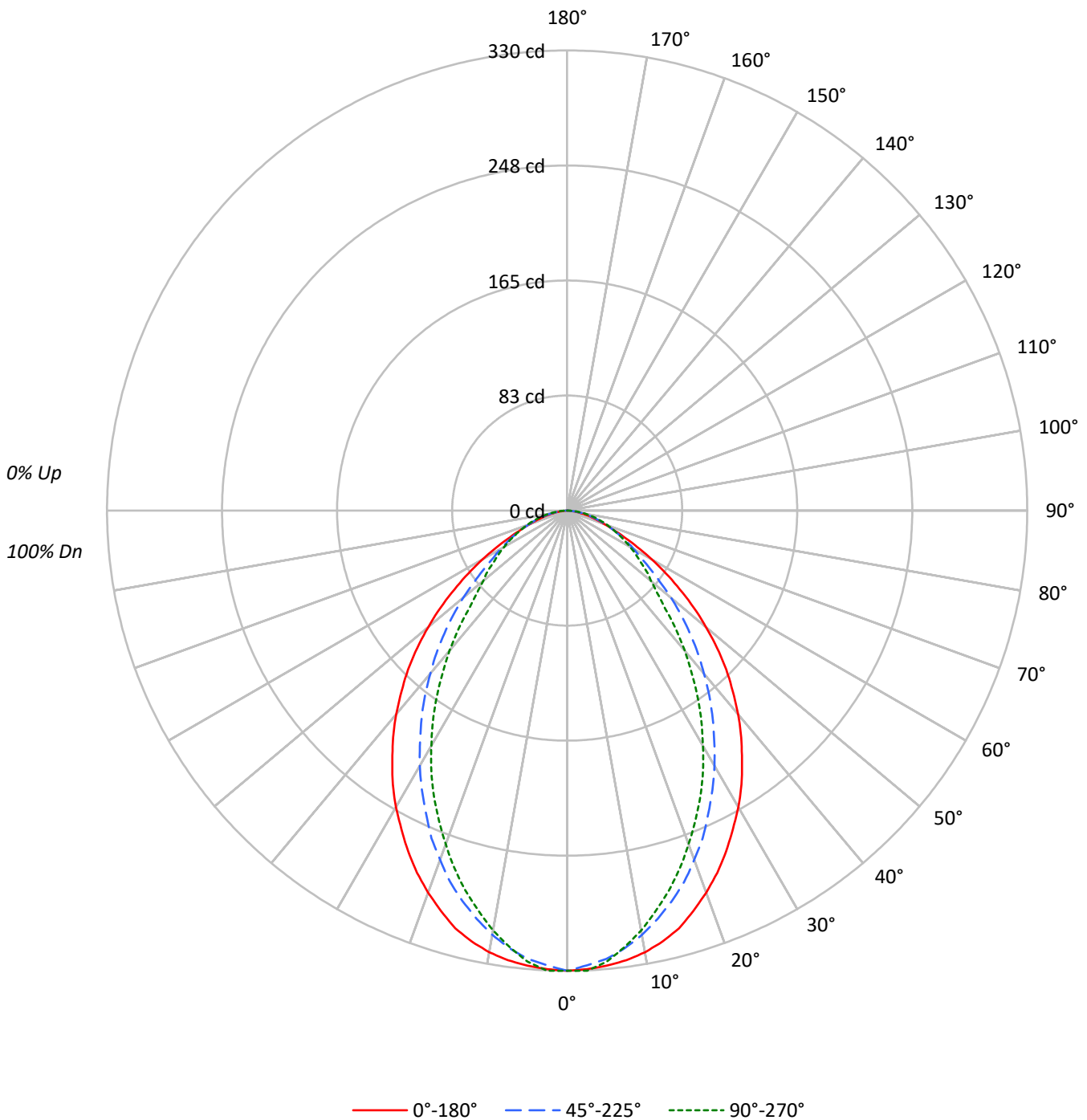
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 577.1 lumens  
Efficiency: N/A  
Efficacy: 46.2 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P1059244

CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1059244

CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-B

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3875	3875	3875
5°	3862	3805	3829
10°	3835	3683	3646
15°	3770	3524	3428
20°	3643	3330	3181
25°	3494	3103	2928
30°	3329	2866	2640
35°	3132	2609	2337
40°	2925	2341	2013
45°	2680	2067	1652
50°	2377	1776	1434
55°	2021	1486	1314
60°	1649	1294	1221
65°	1256	1145	1134
70°	982	1020	1061
75°	789	916	989
80°	588	751	913
85°	323	485	795

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2680 cd/sqm



TEST NUMBER: P1059244

CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.6	5.3
10°-20°	82.4	14.3
20°-30°	112.0	19.4
30°-40°	116.1	20.1
40°-50°	97.9	17.0
50°-60°	69.5	12.0
60°-70°	42.5	7.4
70°-80°	21.1	3.7
80°-90°	4.8	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	225.1	39.0
0°-40°	341.2	59.1
0°-60°	508.7	88.1
0°-90°	577.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	577.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	330	330	330	330	330	
5°	328	328	323	325	325	31
15°	310	304	290	285	282	87
25°	270	258	240	231	226	124
35°	218	202	182	169	163	137
45°	161	144	124	108	100	124
55°	99	88	73	66	64	89
65°	45	44	41	41	41	46
75°	17	19	20	21	22	19
85°	2	3	4	5	6	3
90°	0	0	0	0	0	



TEST NUMBER: P1059244

CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	330.0	330.0	330.0	330.0	330.0
2.5°	329.2	329.6	326.4	330.0	330.3
5°	327.6	327.6	322.8	324.8	324.8
7.5°	325.2	324.4	316.5	316.5	315.7
10°	321.6	319.2	308.9	307.0	305.8
12.5°	316.5	312.5	299.8	296.2	293.9
15°	310.1	304.2	289.9	284.7	282.0
17.5°	301.0	295.1	279.2	272.1	268.9
20°	291.5	282.8	266.5	259.4	254.6
22.5°	281.2	270.1	254.2	245.5	240.3
25°	269.7	257.8	239.5	230.8	226.0
27.5°	257.4	244.3	225.7	215.7	211.0
30°	245.5	230.4	211.4	200.3	194.7
32.5°	232.8	215.7	196.3	184.8	179.3
35°	218.5	201.9	182.0	169.3	163.0
37.5°	205.0	188.0	167.4	153.9	146.7
40°	190.8	173.7	152.7	138.8	131.3
42.5°	175.7	159.4	138.8	122.5	115.4
45°	161.4	144.4	124.5	107.5	99.5
47.5°	145.9	130.1	110.6	93.2	87.6
50°	130.1	115.4	97.2	81.3	78.5
52.5°	114.6	102.3	83.7	73.4	72.2
55°	98.7	88.4	72.6	66.2	64.2
57.5°	84.1	76.5	62.3	59.1	58.3
60°	70.2	63.8	55.1	53.1	52.0
62.5°	56.7	53.1	48.0	47.2	46.4
65°	45.2	43.6	41.2	41.2	40.8
67.5°	35.7	35.7	35.3	36.1	35.7
70°	28.6	29.0	29.7	30.5	30.9
72.5°	22.6	23.8	24.6	25.8	26.2
75°	17.4	18.6	20.2	21.0	21.8
77.5°	12.7	13.9	15.5	16.7	17.4
80°	8.7	9.5	11.1	12.7	13.5
82.5°	5.6	5.9	7.1	8.7	9.5
85°	2.4	2.8	3.6	5.2	5.9
87.5°	0.0	0.0	0.4	1.6	2.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1059244  
 CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-B

**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	13.51	14.96	13.88	15.28	15.59	11.61	13.06	11.98	13.38	13.69
	3H	14.41	15.71	14.79	16.04	16.40	13.18	14.48	13.56	14.81	15.17
	4H	14.69	15.91	15.09	16.25	16.63	13.78	14.99	14.18	15.34	15.72
	6H	14.84	15.96	15.26	16.33	16.72	14.23	15.35	14.64	15.72	16.11
	8H	14.87	15.93	15.29	16.32	16.72	14.38	15.44	14.81	15.83	16.23
	12H	14.86	15.88	15.29	16.26	16.69	14.48	15.49	14.91	15.88	16.30
4H	2H	13.76	14.97	14.16	15.32	15.70	12.15	13.36	12.55	13.71	14.09
	3H	14.87	15.87	15.28	16.27	16.68	13.93	14.93	14.34	15.33	15.73
	4H	15.26	16.16	15.69	16.58	17.02	14.64	15.54	15.07	15.95	16.39
	6H	15.50	16.28	15.96	16.72	17.19	15.21	15.99	15.67	16.43	16.89
	8H	15.54	16.27	16.01	16.72	17.19	15.40	16.13	15.87	16.57	17.04
	12H	15.55	16.20	16.04	16.68	17.15	15.54	16.19	16.02	16.67	17.14
8H	4H	15.42	16.15	15.88	16.59	17.06	14.85	15.57	15.31	16.02	16.49
	6H	15.73	16.33	16.23	16.82	17.30	15.52	16.12	16.02	16.61	17.09
	8H	15.81	16.34	16.32	16.86	17.34	15.78	16.32	16.30	16.83	17.32
	12H	15.84	16.32	16.35	16.81	17.38	15.99	16.46	16.50	16.95	17.52
12H	4H	15.42	16.07	15.91	16.55	17.02	14.84	15.49	15.33	15.97	16.44
	6H	15.74	16.28	16.26	16.79	17.28	15.53	16.07	16.05	16.58	17.07
	8H	15.86	16.33	16.37	16.83	17.39	15.83	16.31	16.35	16.80	17.37